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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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TDK·Lambda

EZA2500-32048

2500W Bi-Directional DC-DC Converter

Features

- 1U rackmount
- Battery Side 48VDC
- Grid Side 320VDC
- High Efficiency (92%)
- RS-485 Communications & Control

Key Market Segments & Applications





Basic Operation



Specifications

Model				
		Low Voltage DC (Battery Side)	High Voltage DC (Grid Side)	
Voltage Range (1) (2)	VDC	36 - 60VDC (48V Nominal)	300 - 380VDC (320V Nominal)	
Output Current (Maximum)	A	±52A	±7.8A	
Constant Current Programming Range (1)(2)	Α	2.4 - 56A	0.5 - 8.5A	
Maximum Output Power	W	±2,496W	±2,496W	
Efficiency	%	92%	92%	
Pre-charge Voltage (required)	VDC	> 36V	>300V	
Inrush Current (Typical)	Α	5.5A	3.6A	
Line Regulation (Maximum)	-	240mV	1.52V	
Load Regulation (Maximum)	-	480mV	3.04V	
Temperature Regulation (Maximum)	-	300mV	1.9V	
Output Ripple & Noise (Maximum pk-pk)	-	480mV	3.2V	
Sink Current (When applied $V > output set V$)	mA	300mA	50mA	
Overcurrent Protection (Manual reset)	A	60A	9.5A	
Overpower Protection	W	2600W (Constant power)	2600W (Constant power)	
Input Current Limit (typical)	A	-	56A	
Under & Overvoltage Protection (2)	V	32 - 68V	260 - 425V	
Overtemperature Protection	-	Yes, Alarm signal is given		
Remote On/Off & Reset (2)	-	Yes		
Parallel Operation	-	Yes (Droop mode, can be set via RS-485)		
Front panel Indicators and Settings	-	Operating mode (Generating, Regenerating & Alarm), Alarm clear & RS-485 address selection		
Operating Temperature	°C	-10 to +40°C, full load		
Storage Temperature	°C	-20 to +70°C		
Humidity (Non condensing)	%RH	Operating: 30 - 90%RH, Storage: 10 - 95%RH		
Cooling	-	Internal fan		
Vibration (Non operating)	-	10-500Hz (1 min sweep), 10.2m/s ² constant for 1 hour in each direction: X, Y & Z axis		
Shock	-	196.1m/s ² maximum		
Withstand Voltage	-	Input (HVDC) to Output (LVDC) 3kVAC, Input to Ground 2kVAC, Output to Ground 500VAC		
Isolation Resistance	MΩ	>100MΩ at 25°C & 70%RH, Output to Ground 500VDC		
Safety Certification	-	UL60950-1, CSA60950-1, EN60950-1, CE Mark (LVD & RoHS2)		
Size (W x H x D)	mm	422.8 x 43.6 x 400mm		
Weight	g	8000g		
vvarranty	Yrs	Five years		

Notes

(1) See installation manual for detailed specifications & test methods

(2) Can be set via RS-485

EZA2500-32048

RS-485 Functions

Model		Low Voltage DC (Battery Side)	High Voltage DC (Grid Side)
Voltage Setting Accuracy	-	< ±0.6V	< <u>±</u> 4V
Current Setting Accuracy	-	< ±0.8A	< +/-0.125A
Voltage Setting Resolution	-	< 60mV	< 0.4V
Current Setting Resolution	-	< 50mA	< 8mA
Voltage Reading Accuracy	-	< ±0.6V	< ±4V
Current Reading Accuracy	-	< ±0.8A	< ±0.125A
Voltage Reading Resolution	-	< 60mV	< 0.4V
Current Reading Resolution	-	< 50mA	< 8mA
RS-485 Baud Rate	-	19.2kbps / 33.6kbps / 57.6kbps (Set by DIP Switch)	
RS-485 Maximum Connection	-	14	



Block Diagram



For Additional Information, please visit us.tdk-lambda.com/lp/products/eza-series.htm

